LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

Vol. I. LOUISVILLE, MARCH 25, 1876. No. 13.

WHO SHOULD BE RESPONSIBLE FOR THE CRIMINAL ACTS OF THE INSANE?

On the night of March 2d a covered sleigh was driven in front of the residence of Dr. John E. Garner, one of the most successful physicians of the city of Milwaukee; a female descended from the sleigh and inquired for the doctor. In obedience to the call Dr. Garner came to his door and stood for a moment on the threshold within two feet of the lady. Not a word was spoken. The sharp ring of a pistol-shot smote the air; Dr. Garner fell heavily upon the floor, and after the lapse of a few hours expired.

The woman who inflicted this outrage was a well known *lunatic*, who had for years threatened the physicians of Milwaukee, under the impression that they had taken the lives of her husband, father, brother, and uncle. Six years prior to the commission of this murder her conduct had become so outrageous that she was arrested by the police; *but as there was no law under which she could be held*, she was handed over to her friends, who took her away from the city.

The following, which we clip from the Geneva (Ohio) Times, leaves no doubt as to her mental condition at the time of committing this deed:

"Mrs. Willner's year's residence in Geneva has been marked by numberless eccentricities of speech and action, dating from her advent as a citizen and continuing to the time of her departure last week. The one leading fancy of her brain, the never-ending source of all her trouble, seemed to be physicians in general, and some particular physician (perhaps Dr. Garner), all of whom were 'throwing out poisonous odors,' as she expressed it, wherever she went, day or night, sleeping or waking, to compass her destruction. Many of her neighbors were friends or acquaintances of her parents, and many were her associates when she was but a child, and all were loth to believe that she was insane, and even those who were well assured of the fact hesitated about taking steps to secure her removal to any insane retreat. Some time in the latter part of January she seemed worse than she had been, and her conduct was such as to terrify her neighbors greatly, and the necessary papers for her removal to an asylum were obtained, but for some cause were not executed, and the case was dropped. About this time she called at the office of this paper, in our absence, and left a notice of her own death, together with a dollar to pay for its insertion. This notice, as nearly as we can recollect it, read:

"'Mrs. A. J. Willner, of Geneva, Ohio, died this morning at nine o'clock. New York, Cleveland, and Chicago papers please copy.'

"The notice not appearing, she called to see about it a few days later, and in reply to our objection on the score of its falsity insisted that it was true—that she was dead to the world—that nobody cared any longer for 'Josephine Church.' When we reminded her that her living presence was before us she said, 'Well, people around home will know it to be false, and it will do no harm; at a distance, in the cities named, they will think it true, and that is just what I want.'

"She no doubt meant it for her imaginary tormentors, thinking that they would cease to trouble her after reading her death notice. It is safe to say that it was the well-settled opinion of this community that Mrs. W. was insane, and the evidences of her supposed insanity are very many. For some weeks before her last departure she had been practicing with a revolver, and often would fire repeated shots from the window of her residence. She had been heard to say often that there was one doctor who must die, and sometimes she coupled with him some other person who was doomed to die; but we do not know that she was in the habit of designating persons by name, although we have heard that she did it sometimes."

It is also in evidence that the father of this woman died insane, after having been for years eccentric to an extreme degree; that as late as January 25, 1875, she addressed a note to the "medical faculty of

Milwaukee," accusing them of trying to torment her to death; that within a few months of this murderous assault upon Dr. Garner she had attempted her own life; and that but the sudden freak of her unsettled mind saved the life of another Milwaukee physician on the same night that Dr. Garner met his fate.

Who is responsible for the acts of a lunatic? Mrs. Willner is now within the custody of the law. It is improbable that she will ever again find opportunity of avenging her fancied wrongs. She will now be placed under that restraint which should have been exercised years before. But what redress is there to the outraged community and family? None whatever. The family of Dr. Garner have been plunged into the depths of sorrow, his little ones have lost their natural protector, many a family mourns the loss of the kindly physician, *because the friends of one mischievous, uneasy, unhappy mind failed to perform their obvious duty.*

How much sorrow, how much unhappiness, has there not come into this world from this one fact! Eccentricities deepening into the varied forms of dementia; the irresponsible, smarting under fancied wrongs, laying plans for revenge; and those who are by law and nature their natural protectors standing idly by discussing the expediency, the authority for exercising the necessary restraint, or the thousand other quibbles of feeble minds, until at last, and often when least expected, the irreparable injury is inflicted.

We demand for the protection of humanity, and in the name of humanity, that laws be enacted holding the natural guardians of persons of unsound mind responsible for the acts of such unfortunates, unless they have instituted proper proceedings, which will give to the sufferer the advantages to be derived from medical treatment.

There is nothing more disgraceful in mental disease than there is in other diseases of the nervous system, than there is in phthisis or in pneumonia. An unhinged mind inflicts no more discredit upon the patient than does a dislocated joint or a broken bone. In the one instance the physician or surgeon is promptly placed in charge of the case; rest, quiet, mechanical or therapeutic interference is resorted to, and the patient resumes his place in the world. In the majority of instances where the earliest symptoms of mental disturbance are treated by the seclusion and protection of institutions especially devoted to the reception of such cases the patient is restored to a life of usefulness; but unfortunately the experience of most communities is the reverse, and almost every physician can recall instances in which his advice, his earnest protestations, have been unheeded, and individuals irresponsible on account of unsound minds have been permitted unrestrained to mingle with the world.

A law holding the natural protector of such responsible for their criminal acts after the symptoms of the disease have been developed would undoubtedly lessen the frequency with which the public is called to deplore the commission of crimes for which there is no redress.

MEDICAL EDUCATION.

For many years there was a cry in the profession all over the country for a more elevated standard of medical education. The complaint prevailed that our college terms were too short, and their courses of study not sufficiently extended. This dissatisfaction in the professional mind led to the formation of the American Medical Association. That body was organized in the belief that abuses would be corrected by bringing the public opinion of the profession to bear upon them. As a result the schools soon took steps looking to a more thorough course of instruction. The lecture terms in nearly all were lengthened from a fourth to one third, and in all, we believe, additional professorships were established. Besides this demonstrative teaching was made a more prominent feature, and in a special manner clinical instruction was insisted upon.

The beneficent influence of the Association was gratefully acknowledged. It was admitted by all but a few carpers to have wrought silently a great change. Nearly every body recognized signs of progress in the profession. If all had not been done that was desirable, still much had been accomplished, and the Association was surely fulfilling its mission. This was the general feeling among physicians.

Some critics of a bilious turn of mind and a few cranky medical journals, it is true, contended that the Association had been a failure, and that medicine was going to the dogs faster than ever. Such was the position of our neighbor of the Richmond and Louisville Medical Journal. The editor of that journal, who is also editor of the American Medical Weekly and dean of the Louisville-Kentucky School of Medicine, declared in his issue for August, 1869, that American medicine was in a state of utter decay—that hardly any thing was "left of its honor, lucrativeness, or respectability." In effect he affirmed "medicine and medical office in America," as compared with their former "glory," were in a state of "disgrace!" Its offices, he continued, were filled with men "consciously" unfit for their places, and therefore "more inexcusable pretenders than the empiric;" and so the "custodians" of the profession were doing all in their power "to make it contemptible."

This was justly looked on as a libel upon the profession; but we wish now seriously to ask our neighbor if the work he is engaged in is not calculated to reduce the profession to the state he pictures in that article of his, headed "Now and Then"? If all the schools in the country should adopt the policy of his Eng-and-Chang concern—giving two courses of lectures a year, and graduating students at the end of each term after nine months' study—how long does he think it would be before the profession would be contemptible, especially if all should go to work flooding the country with "beneficiary scholarships," urging students to accept a medical education as a gratuity? Does any one believe that the honor of the profession could survive such a policy?

But such a supposition is monstrous. The profession is not going back on the progress it has made. It will not countenance any scheme that tends to weaken the respect in which it is held by men. A few misguided students impatient to obtain their diplomas may favor a system which would proclaim medicine a sham, but in the end it is sure to be reprobated by the profession. Medicine is a great, a learned, a noble profession, and every year is adding to its stock of science. A longer pupilage is necessary to master its myriad truths, and not a few weeks' or even a few months' study "off and on." So the great medical tribunal of our country has decided, and so declares the common sense of the people as well as of the medical profession.

Original.

PENETRATING WOUND OF ABDOMEN.

BY H. B. FRISHE, M. D.,
Resident Graduate at the City Hospital.

Feb. 6, 1876: Jack Bond was received into hospital at 11:30 A. M., with an incised wound of the abdomen. The cut was about 2½ inches in length, in the median line, nearly vertical, and from 2½ to 3 inches from the pubes. Through the incision protruded some 10 inches of the small intestine. This was wounded in one place, the cut being ¾ inches long and in the transverse diameter of the gut. Fœcal matter and blood was exuding from it. I immediately sent for Dr. W. O. Roberts, who arrived at the hospital at 12 M. On account of the restlessness of the patient the protruding intestine was now 18 inches in length. After cleansing the parts Dr. Roberts sewed up the rent in the gut. It was necessary to enlarge the incision through the abdominal parietes in order to replace the loop of intestine. This having been

done, the external opening was closed by three sutures, the edges at the inferior angle left slightly apart. Over the sutures were then placed adhesive straps. The patient was in a very intoxicated condition, tossing and rolling from side to side and yelling and swearing at the top of his voice.

Feb. 6, 11:30 A. M.: temperature 98.2°, pulse 108. 12:30 P. M.: temperature 96.6°, pulse 112 (feeble). He was now given 40 drops of laudanum in an ounce of whisky, which was immediately ejected from the stomach. After a lapse of 10 minutes half a drachm of laudanum in a little iced water was given and retained. 2 P. M.: temperature 97°, pulse 104. 6 P. M.: temperature 100.8, pulse 116. Being now restless and complaining of pain in the wounded parts, 40 drops of laudanum were given him. 9 P. M.: temperature 101.2°, pulse 112 (good). He was then resting easy, though not asleep.

Feb. 7, 12:30 A. M.: he was again given 30 drops of laudanum. After this he slept well till 6 A. M. 7 A. M.: temperature 101°, pulse 120 (full). He now got 5 grs. quinine per orem and ¼ gr. morphine hypodermically. In the way of nourishment he took iced milk. Cotton batting to abdomen. 1 P. M.: temperature 102.8°, pulse 114. Was given 5 grs. quinine and half a pint milk and egg. 3 P. M.: complaining greatly of pain in abdomen, he got 30 drops of laudanum. 4 P. M.: temperature 102.6°, pulse 112 (feeble); gave him 5 grs. quinine; resting easy. 7 P. M.: temperature 101.2°, pulse 144 (feeble). At 8 P. M. he had 5 grs. quinine; at 9 P. M. had a severe attack of vomiting; slept well the rest of the night, with hot cloths to abdomen.

Feb. 8, 7 A. M.: temperature 102°, pulse 120 (strong and full); got half a drachm of laudanum to ease pain; took iced milk during day, nothing else retainable on stomach; cotton batting kept on abdomen. 6 P. M.: temperature 101.4°, pulse 116 (good). 8 P. M.: got 60 drops of laudanum and 10 grs. quinine; took a little milk; action of bowels in morning.

Feb. 9, 7 A. M.: temperature 101.8°, pulse 114. At 9 A. M. got ¼ gr. morphine; unable to retain any quinine or laudanum on his stomach. 6 P. M.: temperature 102°, pulse 124 (feeble); had rested well during day; took couple soft-boiled eggs and milk *ad libitum*. At 8 P. M. he got 10 grs. quinine and 60 drops of laudanum per anum.

Feb. 10, 7 A. M.: temperature 101.2°, pulse 112. 7 P. M.: temperature 101.6°, pulse 114 (strong). Rested quiet all day; took milk and eggs, little whisky. At 9 P. M. he got 60 drops of laudanum and 15 grs. quinine per anum.

Feb. 11, 6 A. M.: temperature 98.6°, pulse 108 (small and irregular); wound gaping considerably; the stitches were removed; stercoraceous matter and pus escaping at lower angle; abdomen tense and tympanitic; warm cloths constantly applied to abdomen; takes milk and eggs freely; feels easy. 7 P. M.: temperature 100°, pulse 114 (feeble). At 8 P. M. he got 60 drops of laudanum and 15 grs. quinine per anum; restless till morning; warm application to abdomen kept up.

Feb. 12, 8 A. M.: temperature 101.7°, pulse 120; gave him 30 drops of laudanum. At 11 A. M. he had an attack of stercoraceous vomiting. The wound of abdominal walls is gaping widely; the edges adherent to the omentum, except for a small space at the inferior and superior angles of wound. 7 P. M.: temperature 100°, pulse 114; took about a pint and a half of beef-tea, unable to retain milk; vomited more stercoraceous matter in the afternoon. At 8 P. M. he got 60 drops of laudanum and 10 grs. quinine per anum; at 10 P. M. ⅓ gr. morphine hypodermically.

Feb. 13, 9 A. M.: temperature 97.8°, pulse 120 (very feeble); rested very easy since the hypodermic; had slight rigor early in morning. 1 P. M.: unconscious, muttering delirium; took a pint of beef-tea during forenoon. 7 P. M.: temperature 97°, pulse 116; restless, complains of pain; gave him 60 drops of laudanum per anum. At 10 P. M. had hiccoughs, stercoraceous vomiting; mind wandering, low mutterings; in the

morning first appeared sores and blebs, filled with thick yellow serum, on face and body; was unable to make water during day; drew off his urine every 5 hrs.; hot cloths were constantly applied to abdomen.

Feb. 14, 8 A. M.: temperature 97°, pulse 120 (good); condition good deal better; complains of no pain; introduced drainage-tube, drew off couple ounces pus. 7 P. M.: temperature 97.2°, pulse 120; drew off his water as necessary; took pint of beef-tea and egg and milk during day; vomited several times. At 9 P. M. very restless; ½ gr. morphine per orem; repeated at 10 P. M.; delirious during night.

Feb. 15, 7 A. M.: temperature 97.2°, pulse 124 (very feeble); greatly improved; desires food; drank cup of coffee, took two soft-boiled eggs; still has hiccoughs. At 4 P. M. introduced drainage-tube. 8 P. M.: temperature 97.2°, pulse 120. Drew off his water as required during day; gave ½ gr. morphine per orem at 9 P. M.; keep up use of hot cloths to abdomen.

Feb. 16, 9 A. M.: temperature 97°, pulse 120; but little pus had escaped by the drainage-tube, which was now withdrawn, he complaining of pain; is able to pass his water freely. 8 P. M.: temperature 98.2°, pulse 116 (stronger); beef-tea and eggs in the way of nourishment; resting very easy; sores on face increasing in number and size; has vomited great deal to-day and yesterday.

Feb. 17, 9 A. M.: temperature 98.6°, pulse 118 (very feeble). Gave him 10 grs. quinine and 20 drops of laudanum at 9:30 A. M. At 12 M. muttering delirium; pulse small and irregular; gave him 10 drops of tincture digitalis and 5 grs. carbonate of ammonia per anus. At 3 P. M. slight action of his bowels; pulse stronger; is now conscious; vomited during morning. 9 P. M.: temperature 99.4°, pulse 132. Repeated digitalis and ammonia at 11 P. M.

Feb. 18th: ¼ gr. morphine at 1 A. M. per orem; pulse very feeble. 8 A. M.: temperature 100.5°, pulse 140 (irregular); wandering delirium; gave him 10 drops of tincture digitalis and 5 grs. carbonate ammonia; semi-comatose. At 2 P. M. recognizes me when spoken to in a loud tone; pulse somewhat fuller; has taken no nourishment to-day. At 4 P. M. muttering delirium. Gave him 10 grs. quinine per anum at 5 P. M. 5 P. M.: temperature 103°, pulse 140. 6 P. M.: temperature 103.5°, pulse almost imperceptible. 6:30: died.

Feb. 19th, *post-mortem*, 3 P. M.: Body greatly emaciated; slight hypostatic congestion; several bed-sores on back and side of body; numerous sores and blebs on face.

Abdomen: tense and tympanitic; peritoneum inflamed and thickened; that part in site of the wound gangrenous. Abdominal cavity contained about half a gallon of fœtid greenish-yellow pus. Intestines matted together and adherent to abdominal walls and to each other. Wound of intestine not healed, but half of the intestine for a space of two inches sloughed away. Liver normal, except on lower edge, which was eroded and rounded off from contact with purulent matter in abdominal cavity. Same condition of spleen. Kidneys normal.

Thorax: heart normal, filled with black, clotted blood. About two ounces of bloody serum in pericardial sac. Lungs collapsed; great hypostatic congestion. In upper lobe of right lung were several gritty, friable tubercles. No effusion in the pleural cavities. No pleuritic adhesions.

Cranium: meningitis all along longitudinal fissure; dura mater adherent; otherwise the brain was normal.

LOUISVILLE.

REACTIONS OF ORGANIC ALKALOIDS.

BY C. J. RADEMAKER, M. D.

The alkaloids coniin, nicotin, and hyoscyamin were all prepared by the following process:

One pound of substance was exhausted with dilute alcohol, to which some acetic acid had been added, the alcohol distilled off by means of a water-bath, the remaining liquid evaporated to about eight fluid ounces and then treated with bicarbonate of potash

until the solution had an alkaline reaction. I then added caustic potash in excess. This mixture was agitated with several times its volume of ether, the ether separated and allowed to evaporate spontaneously. The remaining liquid was then treated with dilute sulphuric acid and again agitated with ether, the ether separated from the watery liquid. The aqueous solution was then treated with caustic potash in excess, and the base extracted with ether, the ether separated and allowed to evaporate spontaneously.

CONIIN.

Coniin thus prepared has an oily feel, is of a brown-yellowish color, the odor resembling that of the urine of mice, and a strong alkaline reaction. Coniin has strong basic properties, combining with acids to form salts, of which the chloride is readily crystallizable and crystallizes in beautiful rhombs. Hydrochloric acid added to the alkaloid dissolves it, the solution becoming yellow. Sulphuric acid added to the alkaloid dissolves it; the solution has a purplish red color. If to this a drop of a solution of bichromate of potash is added the solution becomes green. A solution of iodine in iodide potassium added to a solution of coniin produces a precipitate the color of Kermes mineral. Tannic acid produces a white precipitate. Nitric acid produces a blood-red color. If an aqueous solution of albumen is added to one of coniin the albumen is coagulated.

NICOTIN.

Nicotin prepared by the above process is a limpid, oily liquid, of a yellowish brown color, with a powerful irritating odor of tobacco. It is very inflammable, and burns with a smoky flame. Cupric sulphate added to the alkaloid produced a greenish white precipitate of oxide of copper, the supernatant liquid remaining blue, the precipitate being soluble in excess of nicotin. Mercuric chloride and acetate of lead produced a white precipitate. Sulphuric acid added to the alkaloid dissolved it with the formation of a dark brown color. Tannic acid produced a white precipitate soluble in hydrochloric acid. Auric and stannous chlorides produced white precipitates. Sulphocyanide of potassium dissolves it in all proportions. Chlorine converts it into a blood-red liquid.

HYOSCYAMIN.

Hyoscyamin prepared by the above process has an acrid, burning taste, is colorless and inodorous, and crystallizes in silky needles. Sulphuric acid added to the alkaloid produced a brick-red color, and the alkaloid was dissolved. If to this solution a drop of a solution of bichromate of potash was added, and then treated with ammonia in excess, a violet color was produced. Nitric acid added to the alkaloid produced a yellow color, and the alkaloid was dissolved. Hydrochloric acid produced no change. Sulphocyanide of potassium added to a solution of the salts of hyoscyamin produced a white precipitate, the supernatant liquid remaining of a scarlet color. It may be worthy of note that as hyoscyamin is considered a powerful poison, I gave five grains of the chloride of hyoscyamin to a small, healthy dog, with no other unpleasant symptoms than frothing at the mouth and great dilatation of the pupils. The animal recovered completely in about eight hours.

The alkaloids codeia, narcotin, morphin, paramorphia, daturia, strychnia, veratria, aconitia, and atropia were all prepared according to published processes. Of the alkaloids thus prepared, including coniin, nicotin, and hyoscyamin, some were given to dogs and others were mixed with organic matter such as food. In order to separate the alkaloids from the stomachs of the dogs and the organic matter, I adopted the method recommended by Stas, with the exception that I used chloroform and amylic alcohol as well as ether for their separation. The solution of the salt of the alkaloid, as obtained by the method recommended by Stas, I always divided into three equal parts. After decomposing each part with caustic alkali in excess, I treated the first portion with ether, the second with chloroform, and the third

with amylic alcohol, always using equal volumes of each. The solutions of the alkaloids in chloroform, ether, and amylic alcohol were treated with dilute sulphuric acid, in order to get an aqueous solution of the salt. The solutions were separated and the aqueous solutions again decomposed by means of caustic alkali. The alkaloids were separated again by means of ether, amylic alcohol, and chloroform, and the solutions left to evaporate spontaneously.

The result of several experiments with each alkaloid is the following: 1st. Those most readily separated by means of ether; these are coniin, nicotin, narcotin, hyoscyamin, codeia, and paramorphia. 2d. Those that may be separated by means of ether, but in which amylic alcohol is to be preferred; these are morphia and strychnia. 3d. Those that are most readily separated by means of amylic alcohol; these are atropia, aconitia, morphia, and strychnia. 4th. Those most readily separated by means of chloroform; these are veratria and daturia.

LOUISVILLE.

Correspondence.

GALVANO-CAUTERY.

DUELLO BETWEEN THE PIFFARD AND DAWSON BATTERIES.

Dr. H. G. Piffard, of the New York University, read before the Journal Association this evening a paper on galvano-cautery, and as the subject may be of interest to many medical men I send you a condensation of his effort.

"I shall first mention the qualities such a battery ought to possess. The apparatus should be portable, reliable, convenient, and compact. Though any one of these characteristics is readily attained, yet it is no easy matter to secure them all in a single machine. The parts composing such a machine are the battery, the cords, a handle for holding the blades, and the knife itself. The battery consists of a positive, a negative electrode, the fluid, and the vessel."

The speaker then described the action of the battery and the course of the current. By a set of formulæ he demonstrated that the utilizable power was equal to the electromotor power divided by the internal plus the external resistance encountered. The electromotor power is increased by the amount of surface exposed and the strength of the liquid. The resistance varies with the lack of conducting power in the plates used, the cross-section of the battery, and the length of the external conducting wire. When the circuit is made the negative element of the solution seeks the positive electrode, and the positive element the negative electrode. The current is at once set up, but is constantly diminished by the resistance encountered in the battery. This resistance is derived from three sources—the radical of the acid uniting with the zinc soon forms a saturated solution, and this, according to Callot, reduces the conductility of the liquid seventeen times. The hydrogen thus replaced by the zinc adheres to the platinum plate in the form of minute bubbles, and thus interposing itself between the latter and the fluid soon serves to break the circuit. This layer of saturated solution loses its electro-generic power. To obviate these difficulties a mechanical contrivance for agitating the liquid is necessary, and by this means the current is kept at its highest intensity till the elements are exhausted. In regard to the external resistance, the best conductors will offer some resistance, and the greater the resistance the greater the heat evolved; hence the more inferior the conducting wires the greater the heat expended before the current reaches the part *intended* to offer resistance and to evolve heat for the cautery.

The requirements in a current for cautery purposes are (1) *volume*, which enables it to generate heat, and (2) *tension*, which gives it the power to overcome resistance. The former is attained by increasing the *size* of the plates, the latter by the number of plates.

The zinc plates should be of rolled zinc, and well amalgamated. The best amalgam is the following: R. Hydrargyri, ʒ 100; aquæ regiæ, fl.ʒ 500; mix, and heat till the mercury is dissolved; cool, and then add a few ounces of hydrochloric acid.

The two batteries most used in this country are the Burn and the Dawson batteries. In the former the negative electrode is carbon, in the latter platinum. As stated before, the greater the distance between the plates the greater the available power; and yet they must not be so close together as to interfere with the agitation of the liquid. In the Burn battery air is used to agitate the liquid; in the Dawson battery this is done by a framework moved up and down by the hand of the operator. To make room for the framework the plates must be at such a distance apart as will impair the power of the battery, and on this score he preferred the air agitator. "In a battery manufactured for me by the Galvano-Faradic Company using the air agitator I have contrived to utilize the space required for the framework by introducing one more zinc and one more platinum plate. Instead of having the plates one inch apart I have placed them only five sixteenths of an inch from each other. By the additional plates, using the same sized cell as the Dawson battery, I attain a power which compares with that of the Dawson as 10 to 6. My connections are of pure copper and the attachments are gold plated, which, though more expensive, are less liable to abrasion than the nickel plated. A very energetic fluid is the following: R. Potass. bichromat., lb. 1½; acidi sulphurici, fl.ʒ 106; mix, and dissolve the crystals in hot water, making a saturated solution; cool, and then add the acid. A few ounces of nitrate of ammonia improves the solution.

"The pole cords should be of silver or pure copper. Estimating the resistance of the silver at 100, that of pure copper is 100.5; and this small difference makes the copper the preferable of the two on the score of cost. The bundle of wires should be the size of a pencil, and should contain from fifty to five hundred wires, the greater the number the better. The holder should have the circuit on one side continuous, but on the other it should be so arranged that the operator can make and break the circuit at will, thus regulating the heat of the blade. It should be as simple as consistent with the requirements.

"Galvano-cautery in surgery is yet in its coarse infancy, and with its age and popularity must grow its refinement. We now use it for comparatively coarse operations, but ultimately it will be used for smaller operations; and in this connection I would advise blue glasses, as the dazzling light of the blade renders vision imperfect. The battery I offer to the profession is of greater power than the Dawson, and the apparatus for agitating the fluid is more nicely manipulated by the operator himself."

The doctor closed his remarks by exhibiting the power of his battery, which worked apparently to the satisfaction of the audience.

When the lecturer had taken his seat Dr. Dawson, the inventor of the battery bearing his name, promptly rose to defend his instrument. The fire and energy which our young Mercury displayed bespoke at least the attention of the audience. He was flattered, he said, that Dr. Piffard had imitated his battery in almost every particular; and the only essential point in which the new battery differed from his—namely, the air-pumping apparatus—was taken from Burn's battery. To an impartial observer he seemed to think the lecturer's *pure* copper had fallen in with his zinc, and developed an unusual amount of brass. He did not say so, however, but proceeded at once with Dr. Piffard to test the respective merits of the two batteries. At the same time he brought to bear a piece of artillery for which our would-be inventor was to all appearances quite unprepared — namely, a newly manufactured battery precisely like the Dawson battery, but having the same number of plates as Dr. Piffard's. This battery was much more powerful than either of the other two, and, indeed, much more so than there could be

any possible need of, heating a No. 10 wire speedily to whiteness. Dr. Piffard's could claim precedence over the Dawson battery now upon the market in only one particular, and that was only an apparent superiority; for Dawson's commercial battery is quite as strong as ever needed, and, moreover, has the advantage of being the cheaper of the two by $20, and money is a matter of consideration even to a doctor. I think I am safe in saying the audience did not lower the high estimate they have heretofore bestowed upon Dr. Dawson's deservedly popular battery.

ELECTRON.

NEW YORK, March 10, 1876.

INDUCED LACTATION.

The interesting case of induced lactation reported by Dr. Gilbert in No. 11 of the LOUISVILLE MEDICAL NEWS will recall other examples of unnatural nursing. Dr. Napheys, in his "Physical Life of Woman," mentions cases of the flowing of milk in aged women, in virgins, and even in men. Dr. Livingston says that in Africa he has seen old women suckling their grandchildren. Baudelocque tells us of a young girl, aged eight years, who by repeatedly holding to her breast an infant which her mother was suckling gave enough milk to nourish the child several weeks during a time when her mother's health failed. Humboldt speaks of a man who suckled his child for five months. Capt. Franklin saw a similar case in the Arctic regions. Some years ago, in Baltimore, there lived a negro, fifty-five years old, who had acted as wet-nurse to all the children of his master's family. There are instances, too, of prolonged nursing: The French traveler Regnard, who journeyed through Lapland in 1681, says of the women of that country that they gave the breast to their children until the latter were five or six years old; and I have somewhere read of a woman who as a wet-nurse gave milk continuously for twenty-seven years. But it seems that in all these cases the secretion was induced by a *desire* for its occurrence as well as by suction from the nipples. It is a fact known to cattle-breeders that young heifers may be "induced" to give milk before calving or even before carnally knowing a bull. My grandfather, who was an importer and breeder of thoroughbreds, used to select his milkers from heifers which had never taken the bull. High feeding and attempts to milk three times a day would soon bring a copious flow of milk, which would continue, year after year, as long as the cow lived. Of course the cows had no *desire* to give milk; manipulation of the teats, together with good food, alone induced lactation.

WM. J. DAVIS.

LOUISVILLE.

Selections.

POTT'S DISEASE OF THE SPINE—TREATMENT BY MEANS OF THE PLASTER-OF-PARIS JACKET IN BELLEVUE HOSPITAL.—This method of treatment just now is very promising. It is simple, is within the reach of every surgeon, and thus far the results attained have been eminently satisfactory. The jacket is applied in the following manner: Have the patient put on a light wrapper, and then by means of a pulley attached to straps which pass through the axillæ and secured to a cross-bar over the head, suspend him completely or as nearly so as possible. In this way the weight of the body is made to act as a counter-extending force, and removes all pressure from the diseased surfaces of the bones. Now while suspended draw the wrapper down smoothly over the trunk and hips, and then with a roller-bandage filled with plaster begin two or three inches below the crests of the illii, sufficient to secure a firm hold upon the pelvis; first making two or three extra turns of the roller at this point, and then embrace the body by successive turns until the entire trunk is incased to the armpits. If the disease is high up in the dorsal region, the bandage can be carried over each shoulder like a pair of suspenders. It is proper to place a roll of cotton upon each side of the spinal column opposite the seat of disease, and the bandages may be reinforced by strips of tin made rough like a grater to prevent them from sliding, if the size of the patient or other conditions seem to demand it. Two or three rollers are usually sufficient to make a substantial jacket, particularly if they are supported by the tin strips. There is one point with reference to padding the trunk with cotton or other yielding material before applying the roller, and that is, do not pad any more

than is absolutely necessary, for in so doing the irregularities of the surface are almost entirely obliterated, which is just the thing to be avoided. It is the gentle molding of this jacket to the depressions and elevations upon the surface of the body that enables it to accomplish its work and be worn without complaint; whereas, if the trunk is padded with cotton to any great extent, the jacket can not get sufficient hold to keep the pressure off the diseased surfaces, consequently is thrown to one side as inefficient. The straightening out of the patient, so to speak, can be done in any manner the ingenuity of the surgeon may devise. If the patient is a child, for instance, this can be easily accomplished by placing him across the lap of an assistant, who shall separate his thighs until all the extension is made which is necessary. Now, it will be suggested, can respiration be carried on properly while the trunk is incased in such a fixed jacket? Experience so far has proven that nature will take care of that. Indeed, it seems as though a very great benefit is to be derived by keeping the ribs quiet, for they are thus prevented from producing constant rubbing *at or near the seat of the disease in the spinal column.* Again, suppose abscesses are present, how are they to be managed? Simply make a window in the splint, and then the discharge is placed at the command of the surgeon as well as though no jacket were present. Suppose the patient complains of the jacket, that it hurts him, that it does not give him ease from pain, etc.? Remove it at once. Find out where the difficulty is, and remedy it while applying another; for it may be said with a very great amount of certainty that the fault is with the surgeon and not with the plan of treatment. Now, all these points were illustrated in a bright little girl before us, aged twelve years, who had been wearing one of the best constructed braces that American or foreign ingenuity has produced, but which failed to afford the relief desired. Since the plaster-of-paris jacket has been applied she can ride in the cars and walk with perfect ease and comfort, and has gained several pounds in weight.—*New York Medical Record.*

A "Sure Cure" for Rheumatism.—The number of "infallible" cures for rheumatism that have been announced has become a matter of joke. Our readers have doubtless seen the amusing list of a hundred or so of these specifics, professional and non-professional, that has gone the rounds of the papers. Dr. Franz Heller has added one more to the catalogue, and that is *ammonia*, which he advocates enthusiastically in the *Medizinische Presse*, of Vienna. For several years he had been a sufferer from severe muscular rheumatism in the right shoulder. He had taken all the common anti-rheumatic remedies with but little alleviation, when he began to reason that in rheumatism, as in gout, there may be a uric-acid diathesis; he thought that liquor ammoniæ, on account of its rapid volatilization, would be the remedy most readily absorbed and the most prompt in action. He took one drop, diluted with water, and felt immediately a complete relief from the pain, which had lasted for ten hours. He was now able to move freely the arm which an instant before he could scarcely bear to have touched. The remedy, he claims, has proven a positive cure in all recent cases of muscular rheumatism which have fallen under his observation, and these have been many. He also observed its effects in several cases of acute articular rheumatism, in two of which six drops sufficed to subdue the pain and swelling within a period of twenty-four hours. In one case of chronic rheumatism of a finger-joint, which had lasted for over half a year, the simple administration of the ammonia completely dispelled the inflammation and pain in the joint within two days. Of the mode of action of this remedy he says: "If we consider an excessive acidity as the cause of the rheumatism, we can scarcely claim in the cases in which one drop will instantaneously relieve the pain in recent rheumatism that one drop was sufficient to counteract the effects of the excess of uric or (according to Fuller) lactic acid. Nothing remains, therefore, but for us to seek for the source of rheumatism in a morbid nervous activity induced by disturbances of nutrition, and to believe that the ammonia acts as a nervine directly upon the nerves." After the cure of one attack of rheumatism our object should be to put the patient in such a condition as to prevent its recurrence. This, Dr. Heller thinks, can be done by building up the general system, and thus diminishing the nervous excitability.—*Boston Journal of Chemistry.*

Hints from a German Pharmaceutist.—There is a new law in the German Empire which ought to be here also. Every prescription must be written with *ink*, and when one is written with lead pencil it is to be replaced by one written with ink. Another law has been in existence there some forty years by which no druggist shall be patronized by a physician, as is the custom here, where in addition to their fee some doctors receive a percentage on their prescriptions.

Dextrine Mucilage.—A solution of dextrine in water makes a good mucilage for labels, but it is apt to undergo fermentation, especially in warm weather. Various additions have been recommended to insure its keeping, such as quinia, cinchonia, salicylic or carbolic acid, and vinegar or ascetic acid. All these substances are likely to have a preservative influence, but the following, said to be used for Government postage stamps, is probably the best form of a dextrine

mucilage: Dextrine, 2 ounces; acetic acid, 1 ounce; water, 5 ounces; alcohol, 1 ounce.—*Druggists' Circular.*

Miscellany.

SOMEWHAT SIMILAR.

Louisville Med. College.	Ky. School of Medicine.
H. M. Bullitt,	H. M Bullitt,
J. A. Octerlony,	J. A. Octerlony,
John Goodman,	John Goodman,
J. A. Ireland,	J. A. Ireland,
J. M. Keller,	J. M. Keller,
J. W. Maxwell,	
C. W. Kelly,	C. W. Keliy,
Geo. T. Cook,	Geo. T. Cook,
E. S. Gaillard, *Dean.*	E. S. Gaillard, *Dean.*

Same building, same wax-model, mannikin, etc.

Our amiable neighbor, the Medical Weekly, says, "The Louisville Medical News has by ten weeks of unscrupulous defamation and untruthful statements induced some of the most experienced and astute medical editors to believe that the Louisville Medical College and the Kentucky School of Medicine are not separate and distinct institutions. With different charters, different diplomas and seals, with wholly different trustees, who really form the legal corporate body known as a medical college (the faculty really being the offspring of their will), one may well ask, what is there similar about these institutions?" We think we see some likeness. In fact it calls to mind the story of the old negro who, looking fondly at his two dogs, and struck by their resemblance, exclaimed, "Cash and Pomp am mightily alike, 'specially Pomp." No wonder astute editors are deceived by this likeness, and we have no doubt others have thought there was some similarity who have not as yet spoken of it. For ourselves we think that they are alike, "'specially Cash."

—At the late commencement of the Ohio Medical College the dean of that institution indulged in some harmless "blow" in regard to the prosperity and standing of the college he represented. Among other things Prof. Bartholow observed in regard to rival institutions, "Happening one day to be detained in one of the villages I have just mentioned, I strolled into a medical college. This imposing institution occupied some barrack-like rooms in a dilapidated warehouse, and the means of instruction consisted of *one skeleton and a few vials.*" This sort of talk is often indulged in by the officers of colleges, no where to a greater extent than in certain institutions we could name, and generally is received for what it is worth. We had no idea that any one would treat the matter seriously or accept the cap offered; but our contemporary seizes on it savagely for the Phenomenon. We will take up the cudgel for our amiable neighbor this time. The Phenomenon has tolerably good quarters both for its Ortolans and Bobolinks—the same for one brood as the other—for which it pays a pretty good rent, from which circumstance indeed partly arose the Phenomenon; and as to the slur about its having one skeleton only, how many skeletons does Prof. Bartholow expect an institution to have? Does he want it to make a bone-yard of its premises—and this too when it is already in possession of a wax model and a mannikin? Come down to the diploma question, Prof. Bartholow, if you think the Phenomenon is a numerical failure. Are you well enough equipped to give away two diplomas twice a year to fellows that have only been with you nine months? Examine your tan-yard and printing-press before you make statements so "conspicuously absurd."

Fashion and Neuralgia.—A physician of a London hospital, writing to the British Medical Journal, remarks on the increase of neuralgia in the face and head of females compared with the amount of the disease found in the male sex, and says: "There is no doubt that it is one of the most common of female maladies—one of the most painful and difficult of treatment. It is also a cause of much mental depression, and leads more often to habits of intemperance than any other. This growing prevalence of neuralgia may to some extent be referred to the effects of cold upon the terminal branches of the

nerves distributed to the skin; and the reason why men are less subject to it than women may to a great extent, I think, be explained by the much greater protection afforded by the mode in which the former cover their heads when they are in the open air. It may be observed that the surface of the head which is actually covered in man is at least three times that which fashion allows to a woman; indeed, the points of contact between the hat or bonnet and the head in the latter are so irregular as practically to destroy any protection which might otherwise be afforded. If I were to report to the Journal a case of facial neuralgia cured on the principle of protecting the lateral and frontal surface of the face, as well as the superior part of the scalp, it might excite a certain amount of ridicule. I can assure you, however, that my patient considers that her case ought to be reported; for she says that if we can not do much for neuralgia with our prescriptions, we ought to oppose fashion when we find it prejudicial to health and productive of suffering." Women are without doubt the slaves to fashion; but if the ridiculous custom of wearing a make-believe bonnet or hat—a mere frame on which to stick a few feathers and ribbons—is the cause of neuralgia, with all its more serious results, it is time that a more suitable head-covering should be invented.

—Says the unfortunate Weekly, "When poor Thackeray left his advice for his son he requested that whatever he might not be he should at least be a gentleman." Unfortunately "poor Thackeray" had no son; but with "these few exceptions" the anecdote is very good, as Thackeray would no doubt have made the remark if he had had a son. The genius which discovered Dickens' Topsy, etc., is not apt to be too accurate in literary quotations. If there was any thing that Thackeray despised it was sham. We took his motto for this journal because of our great admiration for him and the work we proposed to do in exposing humbug, and especially solemn humbug. What would Thackeray have thought of the Phenomenon which is two schools and one school, high-fee school and low-fee school—any thing, in fact, to bring grist to the mill? If the thing were not so "ill-advised and fatal" to the virtue of our medical youth it would be "comically absurd."

VACCINE "HUMORS."—The story is told of a rural physician who on receiving a sample lot of animal virus on quills supposed them to be toothpicks, and employed them accordingly. During a recent discussion on vaccination it was stated that a druggist who deals in vaccine matter had some returned to him recently with a letter from the physician stating that he had tried it, and it had failed in every instance. On examination it was found that he had merely chipped off a small amount of the wax covering, but had not even reached the tin foil surrounding the crusts. Another doctor boils his quill-points thoroughly before using them, and then thinks "they are not so reliable as crusts taken from healthy children."

PLEASE DON'T!—The "Ingin-givin" Weekly cuts us to the heart. It says, "Unfortunately when the NEWS appeared this journal introduced its editors as physicians of high personal character. . . . The commendation given must reluctantly be withdrawn." As Artemus Ward says, "This is 2 bad." It books us for Louisville for the summer. It was upon that indorsement that we intended to visit the centennial.

—A child in Alabama, eighteen months old, while playing out of doors was attacked by a rooster and knocked down. He received several strokes from the rooster's spurs, and one of them entering the skull through an open fontanelle wounded the brain and caused the death of the child.

—Conundrum: What class of diseases will the Bobolinks feel most at home in treating? Answer: Where the patient has *flocculent* discharges.

—Gentlemen not liking the politics of the NEWS will please not set their dogs on the postman.

—When did "Constant Reader" remove from the Bardstown Road to Cincinnati?